

## REMARKS

The drawings have been objected to as failing to label Figure 1 as “Prior Art” and for failing to illustrate a “polarization direction.” The drawings have been amended, as indicated in the attached Amendment of Drawings.

Claims 1, 2, 4, 7-17, 20, 21, 24 and 25 have been rejected under 35 USC 102(a) as anticipated by Tani (U.S. Patent No. 6,201,339). The rejection is respectfully traversed.

Tani discloses a piezoelectric actuator having a vibrating member with a central portion and a vibratable cantilever extending from the central portion. Referring to Figures 1 and 2 of Tani, a vibrating member or body block 2 has L-shaped oscillating elements or oscillators 21, and a support member or board chassis 3 for supporting the shaft-projecting section 11 (see, col. 4, lines 28-31). The vibrating body block 2 has three units of oscillators 21 provided at an even space, and each of the sections has a structure in which a piezoelectric elements 23 generates extending and shrinking movement and is adhered to a supporting body 24 (see, col. 5, lines 1-5).

The claimed invention (as amended) requires “at least one vibrating member formed substantially of the electro-mechanical transducer.” Support for this amendment may be found in the specification on pages 12-15. This is in contrast to Tani, in which the vibrating member (vibrating block 2) is made from a plurality of piezoelectric elements 23 and a plurality of L-shaped oscillating elements 21, as described above.

Since the recited structure and method are not disclosed by the applied prior art, claims 1, 14, 20 and 24 are patentable. Claims 2-14 (depending from claim 1), claims 15-19 (depending from claim 14), claims 21-23 (depending from claim 20) and claims 25 (depending from claim 24) are similarly patentable.

Claims 3, 5, 6, 18, 19, 22 and 23 have been rejected under 35 USC 103(a) as unpatentable over Tani. The rejection is respectfully traversed for the same reasons set forth with respect to the rejection under 35 USC 102, and for the following reason.

The Examiner states that the “reference does not disclose the direction of polarization or applying voltage in the thickness direction.” However, the Examiner takes Official Notice as disclosing same. However, the Examiner may not make conclusory statements of obviousness without a reference in support thereof. In this regard, Applicants respectfully request that the Examiner cite a reference in support of his/her Official Notice. The Examiner states that it would have been obvious to use the Official Notice to arrive at the claimed invention, but fails to show a reference that teaches or suggests the same. The Examiner may not conclude, without evidentiary support, that one would have been motivated to combine the applied references without presenting a source of a teaching, suggestion or motivation to combine these references. This teaching, suggestion or motivation “must be articulated and placed on the record. The failure to do so is not consistent with...judicial review....conclusory statements [alone can not be used] when dealing with particular combinations of prior art and specific claims, but must set forth the rationale on which it relies.” *In re Sang Su Lee*, 277 F.3d 1338, 61 USPQ2d 1430 (CAFC 2002). Applicants therefore request that the Examiner cite a reference(s) in support of his/her motivation to combine. Claims 3, 5, 6, 18, 19, 22 and 23 are therefore patentable.

In view of the foregoing, claims 1-25 are in condition for allowance. An indication of the same is solicited.

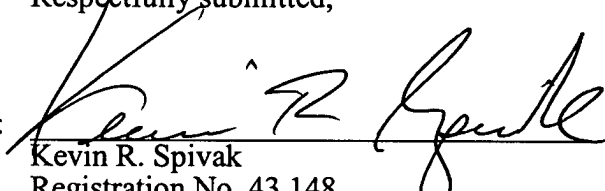
Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned “**Version with markings to show changes made**”.

In the unlikely event that the transmittal letter is separated from this document and the Patent Office determines that an extension and/or other relief is required, Applicant petitions for any required relief including extensions of time and authorizes the Assistant Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing docket no. 325772024200.

Respectfully submitted,

Dated: October 10, 2002

By:

  
Kevin R. Spivak  
Registration No. 43,148

Morrison & Foerster LLP  
1650 Tysons Boulevard  
Suite 300  
McLean, Virginia 22102  
Telephone: (703) 760-7762  
Facsimile: (703) 760-7777

**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

**In the Claims:**

Please amend the claims as follows.

1. (Amended) A driving apparatus, comprising:

a base frame;

an electro-mechanical transducer one end of which is fixed to the base frame;

at least one vibrating member formed substantially of the electro-mechanical transducer;

a moving member frictionally coupled with the electro-mechanical transducer;

and

a driver to drive the electro-mechanical transducer,

wherein the driver applies a voltage such that the speed of extension of the electro-mechanical transducer between the ends thereof differs from the speed of contraction.

14. (Amended) A driving apparatus, comprising:

a base frame;

an electro-mechanical transducer one end of which is fixed to the base frame, the electro-mechanical transducer has a disk configuration and a contact part;

at least one vibrating member formed substantially of the electro-mechanical transducer;

a moving member frictionally contacted with a contact part of the electro-mechanical transducer, the moving member driven to rotate by applying a voltage; and

a driver to drive the electro-mechanical transducer,

wherein the driver applies the voltage such that a speed of extension of the electro-mechanical transducer between the ends thereof differs from the speed of contraction.

20. (Amended) The driving apparatus, comprising:

a base frame;

an electro-mechanical transducer one end of which is fixed to the base frame, the electro-mechanical transducer has a thin plate configuration and a contact part;

at least one vibrating member formed substantially of the electro-mechanical transducer;

a moving member frictionally contacted with the contact part of the electro-mechanical transducer; and

a driver to drive the electro-mechanical transducer,

wherein the driver applies a voltage such that a speed of extension of the electro-mechanical transducer between the ends thereof differs from the speed of contraction.

24. (Amended) A method of driving an electro-mechanical transducer having two sections covered by two active electrodes, and at least one vibrating member formed substantially of the electro-mechanical transducer, comprising:

applying a voltage such that a first section of the electro-mechanical transducer extends at a high speed while a second section of the electro-mechanical transducer contracts slowly; and

applying the voltage such that the first section of the electro-mechanical transducer contracts slowly while the second section of the electro-mechanical transducer extends at a high speed.